

**State of California
Air Resources Board
Board Item Summary**

Item # 22-12-1: Public Meeting to Consider Proposed Research Contract with the University of California, Berkeley, Titled "Children's Health and Air Pollution Study: Standardized Assessments, Attention and Cognition in California Kids (CHAPS: STACK)"

Staff Recommendation:

California Air Resources Board (CARB or Board) staff recommends that the Board approve funding of the proposed research contract with the University of California, Berkeley titled "Children's Health and Air Pollution Study: Standardized Assessments, Attention and Cognition in California Kids (CHAPS: STACK)". The execution of this contract will help CARB better evaluate health benefits of air pollution regulations and policies in California.

Discussion:

In April 2020, the California Air Resources Board (CARB) adopted Resolution 20-13 directing CARB staff to expand health analysis methodologies to provide a more comprehensive analysis of air pollution impacts, including use of additional health endpoints. In response to the Board direction, this proposed study will develop statewide concentration-response (C-R) functions to evaluate air pollutants effects on neurodevelopmental outcomes in children. The study will also provide methodologies for economic valuation of the resulting outcomes. The researchers build on the Children's Health and Air Pollution Study (CHAPS) cohorts, existing CARB funded research in the San Joaquin Valley. This research will examine health effects in racial and ethnic subgroups in addition to statewide average population effects. Some of the neurodevelopmental outcomes to be studied will include child and adolescent standardized test performance, cognitive skills, and attention. The research findings will inform CARB's efforts to expand its analysis of health benefits associated with its current and future programs and regulations.

Summary and Impacts:

The information gained through this contract will support CARB's ability to evaluate the effects of its policies and programs, including a wide range of public health benefits. The project will provide CARB with concentration-response functions that will be used in the health impact assessment. \$ 499,977 is requested to fund this contract. Approval by the Board will authorize staff to put this contract in place to undertake the activities described.